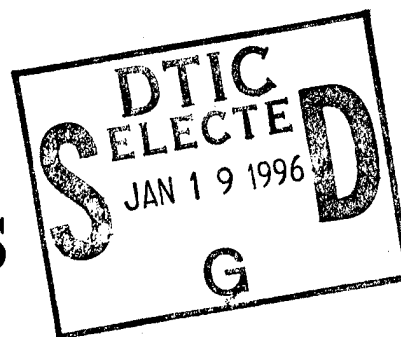


NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS



A COMPREHENSIVE ANALYSIS OF THE NAVAL POSTGRADUATE SCHOOL BOOKSTORE OPERATIONS

by

David A. Peters

June 1995

Principal Advisor:

Mark W. Stone

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**A COMPREHENSIVE ANALYSIS OF THE
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BOOKSTORE OPERATIONS**

David A. Peters
Lieutenant, Supply Corps, United States Navy
B.S., Clarkson University, 1984

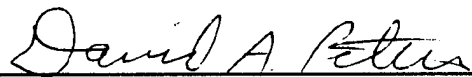
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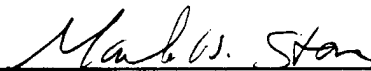
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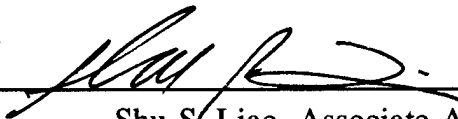


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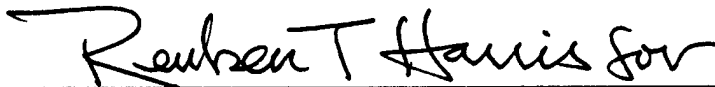
Approved by:



Mark W. Stone, Principal Advisor



Shu S. Liao, Associate Advisor



David R. Whipple, Chairman
Department of Systems Management

ABSTRACT

This thesis identifies inefficiencies in the ordering and selling practices of the NPS Bookstore and makes recommendations for improvement. Additionally, this thesis determines whether the NPS Bookstore provides a reasonable price to the students when compared to other college and university bookstores. It identifies whether or not the NPS Bookstore is meeting the needs of the students, faculty and staff and provides recommendations for improvement. If implemented, the recommendations will lead to improved efficiency and customer service of the Bookstore resulting in increased profitability for the Navy Exchange and improved Quality of Life for students, faculty and staff.

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I. INTRODUCTION

A. OVERVIEW

The Naval Postgraduate School (NPS) Bookstore provides both products and services to its customers. The products consist primarily of textbooks, software and office supplies while the services provided include ordering, selling and buying back of textbooks. Currently the NPS Bookstore operates as a part of the Naval Postgraduate School Navy Exchange.

B. RESEARCH OBJECTIVE

The purpose of this thesis is to determine whether inefficiencies exist in the textbook ordering and selling processes, and if so, to provide recommendations for improvement. This thesis concludes that inefficiencies do exist in the NPS Bookstore operations.

In order to adequately address this issue, this thesis first examines the current NPS Bookstore policies and procedures and then seeks to identify any inefficiencies that may exist through a comparison of policies and procedures with four other nearby college and university bookstores.

C. RESEARCH QUESTIONS

The thesis is modeled around a primary research question and four subsidiary research questions. They are listed below:

1. Primary Research Question

- Are there inefficiencies in the current Naval Postgraduate School Bookstore ordering and selling practices and, if so, what steps can be taken to remove or reduce these inefficiencies?

2. Subsidiary Research Questions

- Are textbooks at the Naval Postgraduate School (NPS) Bookstore more or less expensive than at other college and university bookstores?
- Should the NPS Bookstore continue to be run by the Navy Exchange or should its products and services be outsourced to an outside vendor?
- Is there an optimal number of textbooks to order?
- Are the current buyback policies efficient and beneficial for the students when compared to other college and university bookstores?

The subsidiary research questions were developed to assist in answering the primary research question. The answers to these questions are contained in the remaining chapters and draw from literature reviews, personal interviews and the analysis of data gathered by the researcher. They are summarized in the conclusion.

D. SCOPE AND LIMITATIONS

This thesis attempts to determine whether the NPS Bookstore is more or less expensive for its patrons through a comparison of other college and university bookstores. This thesis provides ideas for increased efficiency and effectiveness of the NPS Bookstore as currently run by the Navy Exchange. To accomplish this, the thesis examines ordering, selling, buyback, return, pricing, and customer service procedures at the NPS Bookstore and compares them to other college and university bookstore procedures. The thesis provides ideas and lessons learned to the Navy Exchange managers that may be beneficial in managing the NPS Bookstore in the future.

This thesis does not conclude whether outsourcing is the

right decision nor does it identify a possible vendor for outsourcing. Rather it provides an analysis of the advantages and disadvantages of outsourcing and whether or not outsourcing should be further pursued.

E. RESEARCH METHODOLOGY

Data for the NPS Bookstore are readily available through the Navy Exchange Officer-In-Charge at the Naval Postgraduate School (NPS). The method of data collection from other college and university bookstores was through telephone contacts with bookstore managers followed up with on-site visits. Managers were asked several questions to learn more about their policies and procedures. Additionally, textbook price lists were requested. The researcher found that the other bookstore managers were very forthcoming with procedure and pricing information since there is virtually no competition for student goods or services between NPS and these other institutions.

F. ORGANIZATION OF THE STUDY

Chapter II of this thesis provides an introduction and background of the current policies and procedures utilized at the NPS Bookstore. It includes a discussion of how requirements are received from faculty and staff and how the ordering and selling process finally gets the textbooks in the hands of the students. Chapter II also includes NPS Bookstore profit and loss information.

Chapter III provides an analysis of NPS ordering and selling procedures. Inefficiencies are identified and analyzed. A comparison between the procedures utilized at the NPS Bookstore and other college and university bookstores is made in an attempt to determine optimal practices. Policies and procedures regarding ordering, selling, buying back and returning textbooks are analyzed. This information was

gathered during the data collection process mentioned above.

Chapter IV presents a direct comparison of textbook retail prices between the NPS Bookstore and three other nearby college and university bookstores. An analysis of textbook pricing policies is also provided.

Chapter V contains conclusions and recommendations. Recommendations for improving the efficiency of the current NPS Bookstore operations are provided. A recommendation whether or not outsourcing should be further pursued is also made.

G. BENEFITS OF THE STUDY

This thesis identifies inefficiencies in the ordering and selling practices of the NPS Bookstore and makes recommendations for improvement. Additionally, this thesis determines whether the NPS Bookstore provides a reasonable price to the students when compared to other college and university bookstores. It identifies whether or not the NPS Bookstore is meeting the needs of the students, faculty and staff and provides recommendations for improvement. If implemented, the recommendations will lead to improved efficiency and customer service of the Bookstore resulting in increased profitability for the Navy Exchange and improved Quality of Life for students, faculty and staff.

II. NAVAL POSTGRADUATE SCHOOL POLICIES AND PROCEDURES

A. BACKGROUND

The Navy Exchange Mission Statement is promulgated in the Navy Exchange Manual as follows:

The mission of an exchange is to provide a convenient and reliable source from which authorized patrons may obtain at the lowest practicable cost, articles and services required for their well-being and contentment; to provide, through profits, a source of funds to be used for the welfare and recreation of Naval personnel; and to promote the morale of the command in which it is established through the operation of a well managed, attractive and serviceable exchange. [Ref. 9: para. 1211]

The Naval Postgraduate School (NPS) Navy Exchange (NEX) provides service members, retirees and their families an alternative shopping location on the Monterey Peninsula. The NEX management must strive to adhere to the mission statement in a competitive environment.

Normally, some of the profits generated from sales made in a Navy Exchange would be channelled directly to the local Morale, Welfare and Recreation (MWR) Fund, in spirit with the NEX Mission Statement. When the NEX reports an operating loss, however, the local MWR receives no direct funding. In this case, the MWR Activity must request a subsidy. [Ref. 7]

In Fiscal Year (FY) 1994, which ran from 01 February 1994 through 31 January 1995, the NPS NEX attained gross sales of \$13,572,000 yet reported a loss of \$226,000 after deducting all operating expenses. The NPS Bookstore contributed a portion of that loss. Section C of this Chapter addresses that issue. Since the NEX operated at a loss, no funds were provided to the NPS MWR Fund. The MWR Department requested and received a subsidy for \$200,000 to support the MWR function. [Ref. 7]

It is important to note that the Navy Exchange is a Non Appropriated Fund (NAF) activity, meaning that no public monies are provided to support ongoing activities. In other words, even though the Navy Exchange is located on Federal land, it does not receive any taxpayer support to finance its ongoing operations. It is self-supporting and must rely on past and present profits to continue operations. The Naval Postgraduate School itself, in contrast, is an Appropriated Fund activity, and as such, does receive taxpayer support. [Ref. 14]

The NPS Bookstore became operational in December 1970 as part of the Navy Exchange. "Prior to 1970, [NPS] operated a textbook lending library which served as a source of textbooks and reference books for officer students and civilian faculty [Ref. 8]." Subsequent to December 1970, students became responsible for obtaining their textbooks through the NPS Bookstore.

Today, the NPS Bookstore still operates as part of the Navy Exchange. The NPS Navy Exchange is unique in that it is the only Exchange in the entire Navy Exchange System which operates a textbook department. [Ref. 7]

B. NAVAL POSTGRADUATE SCHOOL BOOKSTORE

The NPS Bookstore does not have exhaustive written procedures for textbook ordering, receiving and selling. The sole written guidance is provided in Naval Postgraduate School Instruction 4066.1F [Ref. 6]. This instruction is presented for reference purposes in its entirety as Appendix A.

A large part of the information in this Chapter regarding NPS Bookstore policies and procedures was obtained through an interview with the NPS Text Buyer, Ms. La Shanda Hall. Ms. Hall has worked in the NPS Bookstore for approximately seven years in various positions including Cashier and Customer Service Clerk. She has been a Procurement Clerk, or more

specifically, the Text Buyer, for the past two years. [Ref. 1]

The actual procedures utilized for ordering and selling textbooks have evolved over time. Ms. Hall largely follows the mechanized procedures set forth in the Nebraska Book Company's PC Text computer system [Ref. 1]. Amplifying information about PC Text is provided in Section D of this Chapter. Additionally, she relies on her years of experience at the NPS Bookstore, in the textbook ordering process [Ref. 1].

Lieutenant Commander (LCDR) Mike Adams, SC, USN provided most of the data regarding NPS NEX profit and loss information and explained many of the accounting intricacies of the Navy Exchange System. LCDR Adams has been Officer-In-Charge of the Naval Postgraduate School Navy Exchange since July 1994. He was previously Officer-In-Charge of the Navy Exchange in Adak, Alaska. [Ref. 7]

C. NPS BOOKSTORE PROFIT AND LOSS INFORMATION

For accounting purposes, the Naval Postgraduate School (NPS) Navy Exchange (NEX) is divided into forty separate retail departments, such as jewelry, sporting goods or garden supplies. In terms of gross sales, the Textbook Department is the largest of the forty departments. The Textbook Department is limited to textbooks and a small amount of computer software. Although the NPS Bookstore also sells items such as emblematic clothing, magazines and children's books, these items fall into a different retail department and are not included in the accounting and recordskeeping of the Textbook Department. [Ref. 7] For the purposes of the analysis that follows, only the retail Textbook Department is considered.

Table 1 provides a summary of a flexible budget variance analysis for the textbook department. Horngren, Foster and Datar define a static budget as a "budget that is based on one level of output and is not adjusted or altered after it is

finalized." [Ref. 10: p. 228] A flexible budget is a "budget that is developed using budgeted revenue or cost amounts: it is adjusted (flexed) to the actual level of output achieved or expected to be achieved during the budget period." [Ref. 10: p. 228] "A flexible budget variance is the difference between the actual result and the flexible budget amount for the actual output achieved." [Ref. 10: p. 230]. "An unfavorable variance is a variance that decreases operating income relative to the budgeted amount." [Ref. 10: p. 949]

Table 1

Flexible Budget Variance Analysis
Textbook Department
NEX, NPS, Monterey, CA

	Static Budget	Flexible Budget: Actual Sales Times Budgeted Gross Profit	Actual Results
Gross Sales (\$)	1,196,000	1,246,000	1,246,000
Gross Profit (% of Sales)	22.0	22.0	16.9
Gross Profit (\$)	263,000	274,000	210,000

Source: SC01 NEX Operating Statement. Gross Sales and Gross Profit figures are rounded to the nearest thousand.

Gross profit is the first line of analysis in a retail operation. It is the difference between the cost paid and price sold for an item. In order to be a viable business operation, the price received for an item must exceed the cost paid for the same item. If there is no gross profit or it is too low, funds will not be available to cover the remaining

expenses. [Ref. 7]

Net profit for the NPS Bookstore equals gross profit minus direct personnel and direct operating expenses. The combined net profits of all the NPS Navy Exchange retail and service outlets are used to cover indirect general expenses, such as central office and accounting functions. The remaining balance represents the Navy Exchange profit or loss. In summary, gross profit minus direct expenses equals net profit. Net profit minus indirect expenses equals profit or loss. [Ref. 7]

As mentioned previously, the NPS NEX operated at an overall loss of \$226,000 in FY 1994. The planned or budgeted sales in FY 1994 in the textbook department were \$1,196,000. Budgeted gross profit for the textbook department was 22% of sales. Thus, if sales and the gross profit percentage went exactly as planned, budgeted gross profit would have been \$263,000. [Ref. 7]

Actual sales for FY 94, however, were above the budgeted plan at \$1,246,000. Gross profit on those sales was \$210,000, resulting in an actual gross profit percentage of 16.9%. If the planned gross profit of 22% on the actual sales of \$1,246,000 had been realized (i.e., the flexible budget), gross profit would have been \$274,000 instead of the actual result of \$210,000. The result was an unfavorable variance of \$64,000 from the NEX budgeted plan. It was unfavorable because it decreased operating income relative to the budgeted amount. [Ref. 7]

To summarize, the NPS Bookstore performed \$64,000 below its budget in gross profit which contributed directly to the overall NPS NEX operating loss of \$226,000. The gross profit realized was not high enough to cover all direct and indirect costs. Theoretically, it would appear that closing the bookstore prior to FY 1994 would have resulted in an overall NEX operating loss which was \$64,000 less, or only \$162,000.

In reality, this is not likely to be the case. The expected effect of closing the Bookstore on NEX profitability is addressed in Chapter V.

D. NEBRASKA BOOK COMPANY PC TEXT COMPUTER SYSTEM

The NPS Bookstore exclusively uses a computer system called PC Text, purchased from the Nebraska Book Company. The PC Text system includes both hardware and software. Other commercial systems also available include Missouri Text Aid, Follett Text Operational Management Tracking System (Tomtracks) and the Raytex System.

The PC Text system performs a myriad of processes necessary for the efficient ordering of textbooks. A matrix of the common processes available on PC Text is provided in Figure 1. Figure 2 is a matrix of all the necessary steps for requisitioning, ordering, receiving, returning and buying back textbooks. Figures 1 and 2 are training course materials from the Nebraska Book Company PC Text Training Course which Ms. Hall attended in Lincoln, Nebraska. Since the NPS Textbook Buyer relies on PC Text for guidance, Figure 2 is referenced throughout the remainder of this Chapter.

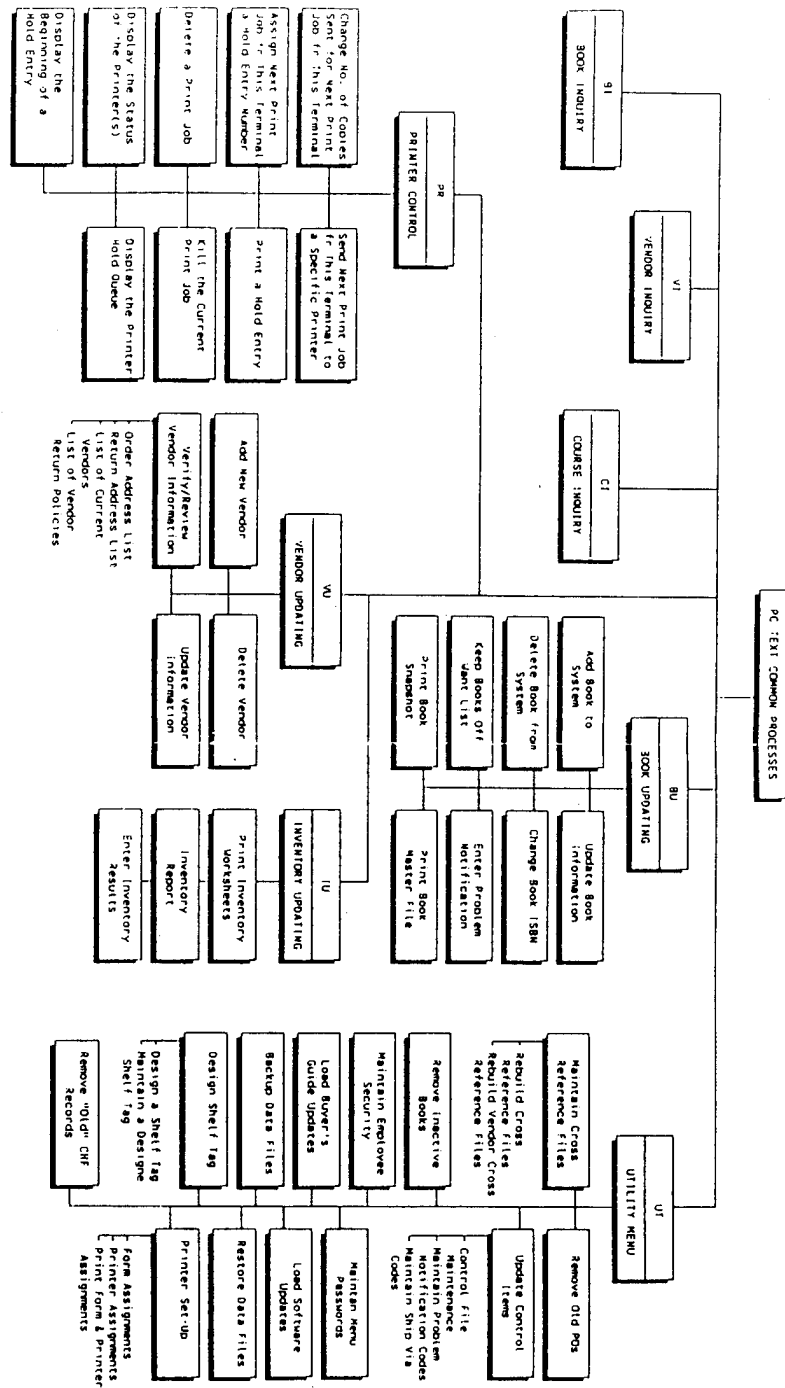


Figure 1. PC Text Common Processes.

In addition to providing a step-by-step procedure for ordering textbooks, the PC Text software includes a database containing current textbook information. The database is updated monthly through magnetic tapes received from the Nebraska Book Company. Each month they also produce and distribute the "Nebraska Book Company Buyer's Guide." The Buyer's Guide and the magnetic tapes include the latest textbook information on all books in print. [Ref. 1]

The PC Text system also maintains on-line historical data on previous orders, returns, pricing and inventory information for one year. Data can be retained on magnetic tape for longer periods than one year, but will not be available on-line.

E. REQUISITIONS

The requisitioning, ordering, receiving and returning of textbooks is a continuous cycle, approximately twelve weeks long, that has no easily identifiable beginning and ending point. For descriptive purposes, the preparation of requisitions will be used as a logical starting point.

PC Text generates textbook requisition forms. This is the form a Professor fills out to notify the bookstore what textbook he wants ordered for the following quarter. A manually prepared sample is provided in the Appendix.

The Bookstore sends out the requisition forms for the next quarter to each Academic Department two weeks into the current quarter. From there, most Departments have a central person who distributes the requisition forms to the individual Professors. The requisition forms are due back to the Bookstore in approximately four weeks, no later than the sixth week of the quarter. In some Departments, one person collects all requisitions and returns them to the Bookstore. In other Departments, Professors return them to the Bookstore individually. Historically, the Bookstore receives only one

half of all textbook requisitions on time. [Ref. 1]

The Bookstore has tried to increase the percentage of on time requisitions through a number of initiatives. The Text Buyer has sent notices to Departments, tried direct contact with Department secretaries, and called Department Chairs. None of those efforts had a noticeable impact on the percentage of requisitions received on time. [Ref. 1] Under the present system, there is little incentive for Professors to submit requisitions on time.

The information required on the requisition forms includes author, title, edition, publisher, requested quantity, and International Standard Book Number (ISBN). All books, including textbooks, have a unique ISBN. The ISBN is a definitive way to identify a book or textbook, and thus an important number to the Bookstore. [Ref. 1]

Upon receipt of the requisitions, the Text Buyer enters the information into the PC Text computer system. The Buyer has to verify the information to ensure the textbook is still in print, the ISBN matches exactly, and the edition is the same one the Professor requested. Differences are researched to determine the causes. Depending on the nature of the discrepancy, the Text Buyer can either consult the "Nebraska Book Company Buyer's Guide" or Bowker's "Books In Print." Bowker's "Books In Print" is a comprehensive listing of all books in print and is much more exhaustive than the "Nebraska Book Company Buyer's Guide." The Text Buyer may also call the Publisher directly or contact the individual Professor in an effort to resolve the problem. The most common reason a Professor needs to be contacted is because his or her requisition form is incomplete, and further information is required before a textbook can be ordered. The data entry and verification process takes approximately two weeks to complete. [Ref. 1]

As part of the requisitioning process, PC Text also

provides an opportunity to enter course enrollment information. The bookstore obtains these data in a hard copy report approximately five weeks into the current quarter from the Registrar's Office. This is the only notice the Registrar gives. Subsequent changes to expected course enrollments are not sent to the Bookstore. [Ref. 1]

F. DETERMINING ORDER QUANTITIES

The next step in the process is to determine order quantities. As shown in Figure 2, the Text Buyer has to print order worksheets for each desired textbook from the PC Text system. The worksheet will show whether the text has been used in any quarter within the last year and which Professor(s) taught the course. The worksheet also contains inventory information of textbooks currently in stock at the Bookstore. Outstanding purchase orders are also listed. The worksheet gives the Text Buyer the option to include the textbook on the buyback list. [Ref. 1] Buybacks are discussed in Section L of this Chapter.

The mechanics of the worksheet are straightforward. The total number of textbooks required for a course are listed first. Adjustments for current inventory and estimated buybacks are subtracted to determine total quantity needed to be purchased. This remaining quantity automatically transfers to the want-list. [Ref. 1] An explanation of the want-list is provided in the next Section.

At this point the Text Buyer has several judgement decisions to make in order to determine how many textbooks to order. No set formula, such as Professor's quantity desired minus ten percent, is used. Rather, determining order quantities appears to be an intuitive process, based largely on the acquired knowledge of the Text Buyer. She uses her past experience, knowledge of the professor, estimated number of buybacks and the quarter offered (e.g., Winter, Spring).

As a general rule, the Text Buyer considers the Registrar's expected enrollment numbers more authoritative than the Professor's requested amount, because she believes the Registrar's numbers are more current. [Ref. 1]

After the order quantities are determined and entered into PC Text, the actual ordering of textbooks from the Publishers and Wholesalers can begin. The next Section explains the ordering process.

G. ORDERING TEXTBOOKS

1. Wholesalers and Publishers

As Figure 2 shows, the first step in ordering textbooks is to produce a want-list from PC Text. A want-list is essentially a listing of all textbooks needed to be ordered for an upcoming quarter. If current Bookstore inventories are adequate to meet the expected demand for the next quarter, the textbook will not appear on the want-list. [Ref. 1]

The want-list shows the quantity required, author, text name, edition and ISBN. It also provides blank working columns which allow the Text Buyer to annotate from which source a textbook will be ordered. [Ref. 1]

The Text Buyer now has two options. She can attempt to order the textbook from either a Wholesaler or a Publisher. Wholesalers deal primarily in used textbooks, which they can offer at a lower price. Used textbooks usually contain highlighting and writing from the previous owner(s). Used books from a Wholesaler can be obtained for approximately one half of the list price available from a Publisher. Publishers, on the other hand, sell new textbooks. [Ref. 1]

The NPS Bookstore's unwritten policy is to try to obtain the lowest priced textbooks for the students. The Text Buyer, therefore, always tries to obtain used textbooks from a Wholesaler prior to placing an order with a Publisher. Used textbooks are often unavailable from a Wholesaler, however.

Historically, the NPS Bookstore is only able to obtain five to seven percent of textbooks from Wholesalers each quarter. [Ref. 1]

Using the want-list as a guide, the Text Buyer contacts Wholesalers by telephone to check on the availability of used textbooks. Because of the large amount of time spent on the telephone, it is a labor intensive process. If the text is available from a Wholesaler, the Text Buyer can provide a purchase order number over the phone. These purchase order numbers are generated by PC Text. Wholesalers do not require a hard copy of the purchase order. As part of the NEX internal control system, however, a hard copy of the purchase order must be generated. The NEX Officer-In-Charge must sign all purchase orders. [Ref. 1]

Often, Wholesalers will only be able to partially fill an order, and the remaining quantities will have to be requested from the Publisher. Wholesalers will ship textbooks immediately, if desired, or they will put the books in a holding bin until a predetermined shipping date. The advantage to this holding bin method is that the Bookstore can add other orders later, and pay only one freight charge instead of several. This results in an overall reduction in freight charges to the NEX. [Ref. 1]

The PC Text system requires all used textbook orders for Wholesalers to be initiated prior to placing any orders for new textbooks from Publishers. Any textbook requirements still on the want-list are transferred by PC Text to the new book list. PC Text then automatically generates purchase orders grouped by individual Publishers. For example, all textbooks published by Prentice Hall will end up on one purchase order. There is no limit to the number of textbooks to be placed on an individual purchase order. [Ref. 1]

At this point, the Text Buyer will send all possible purchase orders to Publishers via the PUBNET network. PUBNET

is a service available from General Electric (GE) that provides an electronic data interchange (EDI) between college bookstores and Publishers. PUBNET is a Service Mark of General Electric Information Services' Communication Network. [Ref. 1]

PUBNET allows the Bookstore to place orders with the Publishers using an on-line computer system rather than placing orders verbally over the phone. Again, a hard copy of the purchase order is not required to be mailed to the Publisher. Publishers will respond with a confirmation of the order via PUBNET, usually within thirty minutes. [Ref. 1]

Unfortunately, not all Publishers are on the PUBNET. Many Publishers are small "Mom and Pop" type operations who either do not have the necessary equipment to access PUBNET or are not willing to pay the subscription rate to GE. This causes a slowdown with textbook ordering because the remaining orders must be placed via telephone, fax or mail. [Ref. 1]

The NPS Text Buyer estimates that approximately 40% of all orders can be placed via PUBNET, but the remaining 60% must be done manually. Each PUBNET order takes approximately twenty minutes to complete, and all PUBNET orders placed by the NPS Bookstore for an entire quarter can be accomplished in one day. The remaining manual orders take from one to two weeks to complete. This is due to the length of time required to place a phone order and the number of Publishers that must be contacted. Additionally, most Publishers are on the East Coast and shut down at 4:30 pm EST, making contact after 1:30 pm PST difficult for West Coast buyers. [Ref. 1]

If, after contacting the Publisher and various Wholesalers, it becomes apparent that it will not be possible to obtain the textbook in the desired quantities, the Professor will be notified. This is most likely to occur when the Publisher is out of stock or when the textbook has recently gone out of print or had an edition change. When

this happens, the Text Buyer sends a "Textbook Problem Notification" form to the Professor via the Department secretary. This form includes the course number, text, author, and brief description of the problem. The Professor will then have to decide whether to choose an alternate text or make other arrangements. [Ref. 1]

To summarize, orders are first placed with Wholesalers in order to get the lowest possible price for the students. If the text is unavailable from a Wholesaler, the NPS Bookstore attempts to make maximum use of PUBNET because it is more efficient than placing orders manually. Since many Publishers are not on PUBNET, however, a large portion of the work must still be done manually.

2. Prepaids

Mr. Russ Grisso, Accounts Payable Manager at the NPS Bookstore, provided the following information on prepaids. He has worked in the Bookstore in this capacity for two years. [Ref. 11]

One problem that arises during textbook ordering is the existence of prepaids. A prepaid is a requirement imposed by certain Publishers that makes payment in advance for textbooks mandatory. In other words, those Publishers will not ship textbooks until payment is received. Mr Grisso estimates that five to ten percent of all textbook orders contain prepayment requirements. [Ref. 11]

This imposes an extra strain on the system by increasing lead time dramatically. The NPS Navy Exchange does not have the ability to issue checks. Payment is centralized at the Navy Exchange Service Center in San Diego, CA. Thus, when a textbook needs to be ordered from a Publisher who requires prepayment, the Accounts Payable Manager must prepare and mail a check request to San Diego. The check request must be an original document and cannot be sent by fax or telephone. It must include an internal control number and be signed by the

NEX Officer-In-Charge. [Ref. 11]

Once San Diego cuts the check, it is returned via mail to the NPS Bookstore. Mr. Grisso then attaches the check to the purchase order and mails both to the publisher. The entire process requires almost three weeks to complete. It takes two weeks for the Bookstore to get a check returned from San Diego and another three or four days to get the check and purchase order to the Publisher. The process can be expedited when necessary by using Federal Express, but this significantly adds to the overall cost of operating the Bookstore. [Ref. 11]

H. SHELF TAGS AND LISTS

Once all textbook orders have been placed, the Bookstore produces a booklist in PC Text and sends copies to each Curricular Office and Department for review. This booklist gives the Professors one last opportunity to ensure the correct textbook is actually on order. [Ref. 1]

As shown in Figure 2, PC Text also permits the printing of shelf tags to be placed on the textbook displays. The shelf tags permit easy identification by the students of the textbook, author, course number and Professor. It also denotes whether a text is required or optional. [Ref. 1]

PC Text also provides an opportunity to print problem notification tags. These tags can be placed on shelves to notify students that a textbook is out of stock or if some other problem exists. This option is not currently in use by the NPS Bookstore. [Ref. 1]

I. RECEIVING

The receiving function at the NPS Bookstore is performed by Mr. Scott MacDonald. He has worked for the Navy Exchange for three years and has been the Receiver for the last eighteen months. He maintains a file of all outstanding purchase orders. When an order is received, he compares the

purchase order to the Publisher's or Wholesaler's invoice. He then determines the retail price and stamps the books accordingly. The invoiced amount from the supplier, not the NEX purchase order amount, is utilized for price determination. The invoiced amount is used because it is the exact amount charged by the vendor. The NEX purchase order amount is an advance estimate of the charges and does not account for price changes. [Ref. 12] Textbook pricing is explained in detail in Section J of this Chapter.

A copy of the receipt paperwork is forwarded to the Accounts Payable Manager. The Accounts Payable Manager is responsible for sending a certified copy to San Diego for payment. [Ref. 12]

J. TEXTBOOK PRICING AND FREIGHT

1. Retail Mark Up

The NPS Bookstore uses a retail mark up method for pricing textbooks. The retail mark up method of pricing must be understood before proceeding. Under the retail mark up method, the Bookstore's retail or selling price serves as the base of pricing. Cost is considered as a percentage of retail, such that cost equals 100% minus the mark up percentage. Mark up, therefore, becomes the difference between retail and cost, i.e. mark up equals 100% minus cost percentage. [Ref. 7]

To compute the retail (selling price) when cost and mark up are known, divide cost by 100% minus mark up percentage. The formulaic representation is:

$$\text{Retail} = \text{Cost} / (100\% - \text{mark up } \%)$$

For example, if the cost of the textbook from the vendor is \$50.00 and mark up is 20%, then the retail (selling) price is \$62.50:

$$R = \$50.00 / (100\% - 20\%) = 50 / 0.8 = \$62.50.$$

The above calculation assumes zero freight charges. Freight is addressed in the next subsection.

Cost represents the amount per textbook charged by the wholesaler or publisher to the NPS Bookstore. It is simply the invoiced amount of the book. NPS Bookstore policy is to add a 20% mark up on all textbooks except those obtained through student buybacks. [Ref. 1] Buybacks are addressed in Section L.

The 20% mark up is expected to cover all variable costs of the Bookstore and make a contribution toward the fixed costs of the NPS Navy Exchange as a whole [Ref. 7]. Pindyk and Rubinfeld define a variable cost as "a cost that varies with the level of output" and a fixed cost as "a cost that does not vary with the level of production" [Ref. 16: p. 202]. Variable costs of the Bookstore include personnel payroll and inventory. Fixed costs include building and equipment depreciation and utilities. [Ref. 7]

The 20% retail mark up is not expected to cover freight charges, a variable cost [Ref. 7]. Freight charges are considered in the next subsection.

2. Freight In

The cost of shipping textbooks, or freight charges, can be significant. The NPS Bookstore bears the burden of paying freight charges for the textbooks it orders and receives. Occasionally, a publisher may offer free freight to its customers resulting in freight charges to the Bookstore of zero. For example, if the Bookstore orders a minimum of 150 books from a publisher at one time, the publisher will ship the books free of charge. The majority of the orders, however, include a freight charge. [Ref. 1]

Lower freight rates may be obtained in other ways as well. The NPS Bookstore belongs to the California Association

of College Stores (CACS) and the National Association of College Stores (NACS). Membership fees in these organizations are nominal and entitle the Bookstore to significant freight charge discounts. Discounts often run as high as 40%. Occasionally, Publishers will provide free freight to CACS and NACS members. [Ref. 1]

Current NPS Bookstore policy is to add 6.50% freight charges to the cost of textbooks prior to applying the retail mark up. Theoretically, the 6.50% is an estimated figure of what total Bookstore freight charges are as a percentage of cost. The 6.50% figure includes freight in for textbooks ordered as well as freight out for returned textbooks. If, however, no freight charges are billed, the NPS Bookstore does not add the freight charge when determining the price of the book. [Ref. 1]

Prior to 1994, the Bookstore added 5.0% freight charges to the textbook cost. In the fall of 1994, Bookstore personnel conducted an informal survey of similar college and university bookstores and found that the average freight charges for those bookstores was approximately 6.50%. They also reviewed approximately one year's worth of shipping and receiving invoices and determined that NPS Bookstore freight charges were similar to the results found in the survey of other colleges and universities. [Ref. 1]

The freight percentage, however, does not represent exact NPS Bookstore freight charge data. Actual freight charges for official recordskeeping purposes are collected and maintained by Naval Material Transportation Office (NAVMTO) in San Diego, CA. The NPS Navy Exchange (NEX) is then billed by NAVMTO for all freight charges. The difficulty in determining exact freight charges for the NPS Bookstore lies in the fact that NAVMTO does not break out ordinary Navy Exchange freight from Bookstore freight, rather it is all lumped together. Thus, NEX management does not have visibility to the exact Bookstore

freight figures. Previous attempts to get NAVMTO to separate Bookstore freight charges from other NEX freight charges have been unsuccessful. The decision to use a single rate for freight, regardless of actual freight cost, was largely based on the inability of NAVMTO to provide the necessary data. [Ref. 7]

As previously stated, when freight charges are incurred on a textbook order, 6.50% is added to cost prior to computing the retail mark up. Using the same numbers as in subsection 1 above, where cost equals \$50.00 and retail mark up is 20%, the retail (selling) price, including freight, is computed as follows:

$$\begin{aligned}\text{Cost} \times 106.50\% &= \text{Adjusted cost (AC)} \\ \$50.00 \times 106.50\% &= \$53.25\end{aligned}$$

Substituting the Adjusted Cost for Cost into the retail mark up equation results in a retail price of \$66.56 as follows:

$$R = \$53.25 / (100\% - 20\%) = 53.25 / 0.8 = \$66.56.$$

In accordance with NPS Bookstore policy, the retail price is rounded up to the nearest nickel [Ref. 1]. In this example the final retail price would be \$66.60.

For tax purposes, the Navy Exchange is considered a Federal Government facility. The NEX does not have to pay State and Federal income taxes or local city business taxes and does not have to charge its patrons sales tax. Purchases made by authorized persons in the Navy Exchange are exempt from state and local sales taxes. [Ref. 15: p. 41] Thus, the price marked on a textbook is the price actually paid by the student at the cash register.

3. Freight Out

The freight charges incurred to return textbooks no longer required, considered freight out, are borne by the NPS Bookstore. These costs are expected to be covered by the 6.50% freight charges added to textbook costs. [Ref. 1] The reasons textbooks need to be returned is discussed in detail in the next Section of this Chapter.

K. RETURNS TO VENDORS

Occasionally, textbooks need to be returned to Wholesalers and Publishers. Wholesalers usually require returns within 60-90 days of purchase while Publishers routinely grant 12-18 months to return a textbook. [Ref. 1]

When a textbook still in Bookstore inventory is no longer required, it should be returned to the Publisher or Wholesaler for a refund. Textbooks can be overstocked for several reasons. Sometimes the Bookstore orders more textbooks than needed. This could occur when it underestimates the number of textbooks it expects to buy back, resulting in excess inventory. Circumstances beyond the control of the Bookstore can also result in overstocked books. Classes may be cancelled at the last minute or the Registrar's enrollment numbers can be inaccurate. [Ref. 1]

Textbooks are returned each quarter unless they will be used in the very next quarter. Even though some courses are taught every other quarter, returning books quarterly is the most prudent course of action because of the uncertainty of which Professor will teach the course next and which text he or she will require. [Ref. 1]

Approximately 15% of all Publishers require preapproved permission before textbooks can be returned while 80% do not require permission. The remaining 5% of all Publishers will not allow any books to be returned once shipped. [Ref. 1]

If permission is required, the Text Buyer must initiate

a "Permission to Return" letter in PC Text. This is a letter which is faxed or mailed to the Publisher requesting their approval to return textbooks. The letter must cite the original purchase order number and cost information. If approved, the Publisher will provide a Return Authorization number (RA#). This RA# must be cited on the outside of all cartons returned to the Publisher. [Ref. 1]

Once the return is approved, the Text Buyer prepares a chargeback in PC Text. This is essentially a packing list which includes original purchase order number, RA#, original cost and retail prices, author, text name, ISBN, edition, date purchased and quantity. [Ref. 1]

Additionally, NEX instructions require the Text Buyer to prepare a memo chargeback. The memo chargeback contains the same information as a chargeback, but is placed on a different form. It is an NEX form required by San Diego for the purpose of adjusting NPS NEX cost and retail accounting records. [Ref. 1] The memo chargeback appears to be a duplication of effort.

Once the paperwork is complete, the Text Buyer pulls the textbooks from the shelf, removes the price tags and boxes the books. The paperwork which must accompany the textbooks includes the chargeback, Permission to Return letter (if required), and an instruction sheet to the Publisher explaining where to send the refund check. [Ref. 1]

The decision of which freight carrier to use for textbook returns is not controlled by the NPS Bookstore. The Receiver has to call NAVMTO, San Diego and ask which carrier to use. NAVMTO requires the weight, number of cartons and destination information. Based on this information, NAVMTO will direct the NPS Bookstore which carrier to use. This centralization is supposed to ensure the best shipping rates are obtained. [Ref. 12]

Because of their cost, returns are not the preferred way

of doing business. The freight charges to return unused textbooks can be significant. Additionally, many Wholesalers and Publishers impose a 5-10% restocking fee on the cost of the book. This fee has the effect of reducing the amount of the refund received. The Bookstore obviously would rather sell the books than return them. [Ref. 1]

L. TEXTBOOK BUYBACKS

The Bookstore obtains approximately 30% of its textbooks through student buybacks. During the determination of order quantities discussed in Section F of this Chapter, the Text Buyer must decide whether the textbook will be included in the buyback list. The Bookstore does not buy back all textbooks, but only those that will be used in the upcoming quarter and were used in a previous quarter. Prior to the end of each quarter, the Text Buyer generates a buyback list based on those earlier decisions. [Ref. 1]

The buyback list is posted outside the Bookstore so students know which textbooks are being purchased. The Bookstore conducts two buybacks of its own, the first during finals week of one quarter and the second during the first week of classes of the new quarter. This system gives all students an opportunity to sell back textbooks even if they still require them during finals week. Currently, the NPS Bookstore does not set a limit on the number of textbooks it will buy back. Any student that wants to sell a textbook on the buyback list is able to do so. [Ref. 1]

The NPS Bookstore pays students 50% of the Bookstore's current selling price of the same new textbook. In turn, it stocks those used textbooks and prices them at 75% of the cost of a new textbook. The end result for the student is a savings of 25% off the cost of a new textbook. [Ref. 1]

The Bookstore also provides a buyback service through a Wholesaler the day after the Bookstore buyback. The

Wholesaler buys back almost all textbooks independent of whether or not the text will be used again at NPS. The advantage for the student is that he or she may be able to sell back a textbook that the Bookstore is not buying. The disadvantage is that Wholesalers offer less than the 50% rate the Bookstore offers. The Wholesaler is buying books based on their market value in general. If there is little or no market, the Wholesaler will not buy the book. Wholesalers may pay as little as 10% of the student's original cost. [Ref. 1]

M. STAFFING

Currently, the NPS Bookstore is staffed by six people. The Bookstore Manager and the Text Buyer work full time. The Receiver and the Accounts Payable Manager work 35 hours and 16 hours per week respectively. One cashier works 30 hours per week while the other works 19 1/2 hours. [Ref. 13]

The Bookstore Manager estimates that all of the hours worked by the Text Buyer and 95% of the hours worked by the Receiver and Accounts Payable Manager are directly traceable to the Textbook Department [Ref. 13]. Theoretically, if the Textbook Department did not exist, those positions would not be necessary.

N. SUMMARY

This Chapter described the procedures utilized by the Naval Postgraduate School Bookstore and explained the policies relating to the purchasing and selling of textbooks. Chapter III examines the procedures and policies of four different college and university bookstores and provides an analysis of the relative benefits and drawbacks of selected methods used at those schools.

III. ANALYSIS OF PROCEDURES USED AT OTHER COLLEGE AND UNIVERSITY BOOKSTORES

A. INTRODUCTION

This chapter provides a comparison between procedures used at the NPS Bookstore and procedures used at other college and university bookstores. An analysis of the different procedures is provided. Data were gathered during interviews with Text Buyers and Managers of college bookstores at Stanford University, University of California at Santa Cruz (UCSC), Cabrillo College in Aptos, California and De Anza College in Cupertino, California.

B. BACKGROUND

1. Stanford University

At Stanford, the researcher conducted an interview with Mr. Hani Sayegh. Mr. Sayegh is the Course Materials Manager of the Stanford Bookstore in Stanford, California. Mr. Sayegh has been with Stanford in that position for six months. His previous experience in college and university bookstores includes fifteen years at University of California, Berkeley, six years at California State University, Fullerton and six months at Follett, a privately run college bookstore. [Ref. 4]

Stanford is a four year private University with an enrollment of 13,000 full time equivalent students. Stanford operates on the quarter system. The Stanford Bookstore is an independent, not-for-profit organization. [Ref. 4]

2. University of California, Santa Cruz

At the University of California, Santa Cruz (UCSC), the researcher conducted an interview with Ms. Brooke Curry. Ms. Curry is the Coursebook Buyer for The Bay Tree Bookstore in Santa Cruz, California. She has been with UCSC in that position for a year and a half. Previously she was a text buyer at the Sonoma State University Bookstore. [Ref. 3]

UC, Santa Cruz is a four year State University with an enrollment of 10,000 full time equivalent students and operates on the quarter system. The Bay Tree Bookstore is run like a private bookstore, generating a profit and paying its own bills, but operates under the umbrella of UCSC. [Ref. 3]

3. Cabrillo College

At Cabrillo, the researcher conducted an interview with Mr. Michael Derr. Mr. Derr is the Text Buyer and Assistant Manager for the Cabrillo College Bookstore in Aptos, California. He has been with Cabrillo in that position for 2 1/2 years. Previously he was Text Buyer at the Naval Postgraduate School Bookstore for eight years. He worked for the Navy Exchange for a total of twelve years. [Ref. 2]

Cabrillo is a two year State College with an enrollment of 7,150 full time equivalent students and operates under the semester system. The Cabrillo College Bookstore is affiliated with the college but operates like a private bookstore. Thus, it is chartered to make a profit and is required to pay rent and utilities. [Ref. 2]

4. De Anza College

At De Anza, the researcher conducted an interview with Mr. Herb Behrens. Mr. Behrens is the Courseware Supervisor for the De Anza College Bookstore in Cupertino, California. He has been at De Anza in the textbook department for ten years. Previously he was manager of Stacy's Books for twelve years. Stacy's sells medical and technical books and textbooks. He was also manager of a B. Dalton Bookstore for one year, and he owned and managed his own bookstore for thirteen years. Mr. Behrens has been involved with books and textbooks since 1958. [Ref. 5]

De Anza is a two year State College with an enrollment of 10,570 full time equivalent students and operates under the quarter system. The De Anza College Bookstore is owned and run by the College. [Ref. 5]

C. COMPUTER SYSTEMS

The Cabrillo College and UC, Santa Cruz Bookstores both use the same Nebraska PC Text computer system used at the NPS Bookstore [Refs. 2, 3]. The De Anza College Bookstore uses the Missouri Text Aid system, which is very similar in operational and informational capabilities to the PC Text system [Ref. 5]. Essentially, PC Text and Missouri Text Aid are interchangeable with little variation in capabilities.

According to Mr. Hani Sayegh, the Stanford Bookstore uses the Raytex system. In his previous positions, Mr. Sayegh has worked with the PC Text, Missouri Text Aid and Follett Tomtracks (Text Operational Management Tracking System). The Raytex system, which is also used at UCLA, is a computerized system which combines all facets of the Bookstore, including textbooks, into one system. It includes Point of Sale (POS) capabilities, which allow real time inventory, pricing and shipping information. Managers and Text Buyers have the ability to access the system by course, book title, author, instructor, quarter and new edition, to name a few. This flexibility is a significant difference between Raytex and PC Text or Missouri Text Aid. [Ref. 4]

Another difference is that, unlike the others, the Raytex system can be customized to the needs of the particular bookstore. If a manager decides he or she wants a report in a different format or requires additional information, the system can be tailored to meet the need. Stanford accomplishes this by employing its own on-site programmer. Although the Raytex system does not require an on-site programmer, the availability of one makes the system more flexible and powerful. [Ref. 4]

According to Mr. Sayegh, the Raytex system is the fastest, easiest and most efficient and powerful system available. The ability to customize the Raytex system gives

it a significant advantage over the other systems discussed.
[Ref. 4]

The primary disadvantage to the Raytex system is the cost. It is expensive to install and maintain. The cost of a full time programmer is more than many bookstores could afford. Mr. Sayegh estimates that the advantages gained through increased efficiency and visibility would outweigh the cost in a bookstore that achieves at least \$500,000 in gross sales. [Ref. 4]

For managers who require specialized reports, the Raytex system provides that capability. For bookstores that require little more than a system that cuts purchase orders and maintains some historical data, PC Text or a similar system would be more cost effective.

D. REQUISITIONS

The Stanford, UCSC, Cabrillo and De Anza bookstores perform the requisition process in a similar manner to the NPS Bookstore. All send their requisitions to the Professors through departmental secretaries or administrative assistants. Responses are received either directly from the Professors or via the departmental secretaries.

. Regardless of the method used, the percentage of timely submissions by the Professors are surprisingly similar. As mentioned earlier, the NPS Bookstore estimates a 50% on time submission rate, which is the same for Cabrillo [Ref. 2]. The Stanford and De Anza Bookstores both estimate a 40% on time submission rate [Refs. 4, 5]. UCSC estimates their on time submission rate to be between 25-30% [Ref. 3].

All Text Buyer interviewees agreed that late submission of requisitions by Professors is the main reason textbooks are not available at the beginning of a quarter or semester. Late submission also drives up freight costs as the use of expedited shipping methods such as Federal Express and UPS

Next Day Air and Second Day Air increases.

Each school has tried different methods of increasing on time submission of requisitions with varying degrees of success. When the Professor submitted his or her requisition on-time, UCSC offered students a 5% discount on the price of the textbook. This method failed to increase the percent of on time submissions. [Ref. 3] The incentive in this case is not a personal one for the Professor. Whether or not the Professor submits a requisition on time, he or she has nothing personal to gain. This method makes the assumption that a Professor will be on time so the students will get a good deal. This assumption may be flawed. It would be better to find a way to incentivize the Professors through some form of personal gain.

The De Anza College Bookstore tried an innovative approach to increase the percentage of on time submissions. They advertised a random drawing for the giveaway of free turkeys. All Professors who submitted on time requisitions were eligible. Their names were placed in a hat for the drawing. While they gave away several turkeys, the percent of on-time submissions failed to increase. The De Anza staff concluded that Professors cannot be motivated in this manner and tried a different approach. [Ref. 5]

De Anza next tried sending a delinquent list to Division Deans. This brought in several additional requisitions, but since they were already late to begin with, the percentage of on time requisitions did not increase. [Ref. 5] One possible alternative is to submit an interim list to Division Deans prior to the actual requisition deadline.

The Stanford Bookstore tried a unique public relations approach. They held a Secretary and Administrative Assistant Day at the Bookstore. They invited all secretaries and administrative assistants to a brief informational forum. They brought in a President of a major publishing company and

had him explain why late submissions are hard on the students, the bookstores and the Publishers. The ordering process was briefly explained. Secretaries were shown the positive impact they could have on the process by following up with Professors to ensure requisitions were in on-time. Actual figures for the percentage increase of on time submissions were not available, but the Stanford Bookstore Course Materials Manager was confident that the increased awareness of the process significantly increased the on-time submissions. They plan to utilize this method again in the future. [Ref. 4]

The Cabrillo College Bookstore uses a different approach by providing a disincentive for not submitting requisitions on time. If a Professor is a "late hire," meaning he or she was hired to teach a course after the textbook requisition deadline, the bookstore will order the textbook UPS Second Day Air and absorb the additional freight cost. If however, the Professor is not a late hire and simply failed to submit the requisition on time, the bookstore will not routinely use an expedited shipping method. If the Professor needs the textbook expedited, he or she must obtain permission from the Department Head, who must authorize the rush shipment. Additionally, the cost of the expedited freight is charged to the funding of the Department. Thus, the bookstore is reimbursed for excess freight charges. This method does not, however, reimburse the bookstore for the extra work effort involved. The percent of on-time submissions rose significantly when this policy was implemented. [Ref. 2]

Cabrillo's policy is essentially a disincentive to submitting late requisitions. Its actual effectiveness would be tied to the ability of the bookstore to make the policy stick, the degree of interest of the Department Heads, and level of funding of the Departments. If the Departments are on a tight budget, this policy would be more effective than when the Departments had a large budget.

E. DETERMINING ORDER QUANTITIES

In a seminar given by a major textbook Publisher, Mr. Hani Sayegh of the Stanford Bookstore learned that the national average for textbook returns is 30% [Ref. 4]. This means that three out of every ten textbooks ordered are ultimately returned to the Publisher.

The cost of ordering too many textbooks can be significant. The bookstores are usually required to pay freight in to the bookstore and always required to pay freight out to the Publisher or Wholesaler. They also incur sizeable labor costs for receiving, stocking and subsequently returning textbooks. As mentioned in Chapter II, many Publishers require a 5-10% restocking fee, while others will not accept any returns. When Publishers will not accept returns, the bookstores absorb all costs and are also left with textbooks in inventory which cannot be sold. These unsalable textbooks must be either be marked down or written off as an expense. Thus, it is imperative to order the optimal number of textbooks.

Ordering the optimal number of textbooks is not a simple process, however. Many unknown factors influence the process. The National Association of College Stores (NACS) estimates that 25% of college students do not even purchase required textbooks [Ref. 5]. The students may borrow the books, survive on class notes, or check out the book at the library. The cost of the book, the amount of money a person has, and the known usage of a book by a Professor impact the number of books purchased [Ref. 5]. Students may also purchase a used text directly from a previous student. All of these actions impact the optimal number of textbooks to order.

Other unknowns also factor into the ordering process. Because students add and drop courses, the final class enrollment numbers are rarely known with certainty at the time

of textbook ordering. If a textbook is being used for the first time or the course is a new offering, it can have an effect on the process. The number of buybacks must be accurately predicted or else the ordered quantities will be inaccurate.

Because of the high degree of uncertainty involved in the ordering process, it was not surprising to find that none of the bookstores visited used a standard formula to determine order quantities. Rather, they utilized general rules of thumb. These are general guidelines and not mandatory requirements the text buyers have to follow.

An example of a rule of thumb for text buyers can be found at the Stanford Bookstore. Orders for new textbooks for new classes are reduced by 10%, based on the uncertainty of the demand. The Stanford Bookstore can often afford to lower the number of textbooks ordered because it has a unique advantage that few other bookstores have. It has 150,000 titles in its trade publication section which includes many of the same textbooks used in classes. The Stanford Bookstore has a built in cushion because it has the ability to draw on inventory from its trade publication section to cover shortages in its textbook department. [Ref. 4]

The Cabrillo College Bookstore also follows a few rules of thumb. The Text Buyer cuts orders by 10% if the order is with a Publisher that will not accept returns, and by 5% if the order is with a Publisher that requires advance permission to return textbooks. In the former case, the Text Buyer is trying to avoid getting stuck with textbooks that he cannot return. In the latter case, the Text Buyer is avoiding the labor intensive "Permission to Return" letters. The Text Buyer acknowledges that this method occasionally results in an out of stock situation, but mitigates the problem by using the Master Text Listing (MTL). The use of the MTL is analyzed in the next Section of this Chapter. [Ref. 2]

As stated in Section F of Chapter II, at the Naval Postgraduate School Bookstore determining order quantities appears to be an intuitive process, based largely on the acquired corporate knowledge of the Text Buyer. Research at the Stanford, UCSC, Cabrillo and De Anza Bookstores supports that position. All of the Bookstores rely on the expertise of their text buyers to determine proper order quantities. Each of the text buyers utilize past experience and knowledge of the Professors as an important part of the process. They all rely heavily on their respective computer systems to provide past history of text usage. The history will include information on the quantities ordered, sold and returned. The computer will provide the number of buybacks from students. This provides an estimate for the number of buybacks the buyer can expect in this quarter or semester. The computer also indicates which Professor taught the course, which often influences the number of textbooks the buyer will order.

The past history information provided by the computer and the buyer's ability to interpret this information is critical to the ordering of optimal quantities. An experienced buyer is more likely to order more accurately, but the uncertainty in the process makes it impossible to be right in every case.

• How many textbooks the bookstore ultimately orders depends on the experience of the buyer and the philosophy of the bookstore. Stanford's emphasis is to ensure the books are available when needed and avoid any shortages. Cabrillo will cut quantities, recognizing that it may result in an out of stock situation for the student, and then reorder, in order to avoid returns. [Refs. 2, 4]

F. OUT OF STOCKS

Invariably, all bookstores run out of stock of a certain textbook and find they must reorder. The need to reorder textbooks can result from several factors. The text buyer may

have cut the quantity too much. The Registrar's numbers may have been lower than the final actual class size or an unexpected number of students may have added the course. If the number of buybacks from students was overestimated by the text buyer, the bookstore will have a shortage.

For a large shortage, the Text Buyer will likely have to order through the normal channels and go to the Publisher or Wholesaler to get the textbooks. For smaller shortages, however, an alternative method of obtaining textbooks exists. This alternative method is called the Master Text Listing (MTL). The MTL is a service provided by the California Association of College Stores (CACS). CACS members can obtain a subscription copy of the MTL by paying \$35.00 to CACS. [Ref. 4]

The Master Text Listing provides a listing of all textbooks used by participating CACS members. If a bookstore finds itself out of stock on a particular text, it can look up that textbook in the MTL and see if any other college or university bookstores are using that particular text. The MTL provides the telephone number, facsimile number, and Points of Contact at the other bookstores. As part of the agreement, bookstores agree to sell the books listed on the MTL at the same price that they obtained from the Publisher or Wholesaler. Participating bookstores also agree to ship via United Parcel Service (UPS) within 24 hours. [Ref. 2]

Mr. Michael Derr, Text Buyer at the Cabrillo College Bookstore, stated that he uses the MTL regularly for reorders of two or three textbooks. He stated that it is usually quicker and easier than obtaining the textbook from the Publisher. [Ref. 2]

Mr. Hani Sayegh, Course Materials Manager at the Stanford Bookstore, sees the MTL as an expedient and efficient method for obtaining textbooks in a pinch. He also views it as a good way to reduce inventory, by selling textbooks to other

bookstores. It is an alternative to returning books. The Stanford Bookstore uses the MTL as a way of avoiding Publishers requiring prepayment for textbooks. If the text is available on the MTL, Stanford tries to obtain it from another bookstore. This avoids having to deal with the use of prepaids and improves the delivery time significantly. [Ref. 4]

Mr. Sayegh has encouraged his staff at Stanford to take the Master Text Listing concept one step further. The Stanford Bookstore regularly exchanges expanded booklists with the University of California, Berkeley Bookstore. The lists are even more current than the MTL and include tradebooks and other products not normally included on the MTL. The idea works well because of their close proximity and similarity of curricula. [Ref. 4]

The Stanford, UCSC, Cabrillo and De Anza Bookstores all use the MTL to varying degrees to obtain textbooks, usually reorders, in a quick, efficient manner. Although they belong to the CACS, the Naval Postgraduate School Bookstore does not currently subscribe to the MTL. The NPS Bookstore Manager states that the unique nature of the textbooks used at NPS precludes the usefulness of the MTL, and that it is therefore not cost effective to subscribe [Ref. 13].

G. ORDERING TEXTBOOKS

Once order quantities were determined, general ordering procedures did not vary significantly among the bookstores researched. All attempted to first obtain textbooks from Wholesalers in order to give the students the lowest possible price. Once opportunities with Wholesalers were exhausted, Text Buyers turned to Publishers for remaining quantities. The difference existed in how the bookstores physically placed the orders. They used some combination of PUBNET, Easylink, phone, facsimile and mail.

1. PUBNET and Easylink

PUBNET, an automated ordering process between Bookstores and Publishers, was explained in Section G of Chapter II. The NPS Text Buyer estimated that PUBNET could be used for 40% of all orders. The Cabrillo and Stanford Buyers estimated 50% and over 60%, respectively [Refs. 2, 4]. PUBNET cannot be used to place orders with Wholesalers, however.

Fortunately, another automated system, called the Easylink Network, is available to link bookstores with Wholesalers. Easylink is a service available from Western Union that provides an electronic data interchange (EDI) between college bookstores and Wholesalers. Easylink is a Service Mark of Western Union. The main difference between Easylink and PUBNET is that the former is used to place orders with Wholesalers while the latter is used to place orders with Publishers. [Ref. 4]

The Cabrillo and Stanford Bookstores use Easylink to process 15% and 20% of their orders, respectively [Refs. 2, 4]. The UCSC and De Anza Bookstores also use Easylink to order from Wholesalers. Like PUBNET, Wholesalers connected to Easylink will usually respond within thirty minutes of a bookstore's query. Advantages to Easylink are that it is fast and economical. It saves telephone, facsimile and labor time. For example, Easylink will process thirty orders in an instant, while thirty telephone orders will take at least five minutes each. [Ref. 4]

Since both PUBNET and Easylink provide an economical and streamlined method of textbook ordering, both methods should be exhausted before using the labor intensive telephone and facsimile ordering methods. Currently, the NPS Bookstore does not use Easylink for placing any orders [Ref. 1].

2. Prepaids

The existence of prepaid requirements is a problem for all bookstores. It causes delays and increases labor. As stated in Section G of Chapter II, the NPS Bookstore has to send check requests to San Diego. At the UCSC Bookstore, prepaid requests have to go through the University Accounting Office. It can take up to one month for the check to come back to the bookstore [Ref. 3]. At Stanford and De Anza, where prepaids also go through a central accounting office, delays inevitably occur [Refs. 4, 5]. Only the Cabrillo College Bookstore maintains its own accounting function. It has the ability to cut checks upon demand, significantly reducing the problems caused by a prepaid order [Ref. 2].

The Naval Postgraduate School Navy Exchange is not authorized to maintain its own accounting function. Close liaison must be maintained between the Text Buyer, Accounts Payable Manager and San Diego accounting office personnel to ensure the process runs as smoothly as possible.

H. PROBLEM NOTIFICATION TAGS

Ms. Brooke Curry, Coursebook Buyer for the Bay Tree Bookstore at the University of California, Santa Cruz (UCSC), identified one specific inefficiency worth noting. UCSC textbook buyers were spending a large amount of time each day answering students' questions. By far the most common question asked by students was when an out-of-stock textbook would be available. The Bay Tree Bookstore solved this problem by developing Problem Notification Tags. The tags are placed on the shelves where an out-of-stock textbook would normally be located. The tags identify the textbook title, author and course number and indicate the reason the book is not in stock. The most important feature of the tag is that it indicates the date the next shipment of books is expected to be in stock. According to Ms. Curry, this effort

dramatically reduced the number of questions that had to be answered by the buyers and increased the time spent on textbook ordering. It also improved customer service. Instead of having to track down a buyer to find out when a book would be in, the student can now simply look at the Problem Notification Tag, and avoid further frustration. [Ref. 3] Problem Notification Tags are also in use at the Stanford and De Anza College Bookstores. [Refs. 4, 5]

While conducting interviews at the Naval Postgraduate School Bookstore, the researcher observed that the Text Buyer had to stop work on numerous occasions to answer questions regarding textbook availability. A large percentage of those questions could have been answered through the use of Problem Notification Tags, thereby decreasing work stoppages and increasing Bookstore efficiency.

Section H of Chapter II noted that PC Text allows the print out of Problem Notification Tags. The time required to log into the computer each time to print a tag does not appear particularly efficient. A tag that can be manually completed may be faster and easier. A sample Problem Notification Tag, modeled after the one in use at the Bay Tree Bookstore at the University of California, Santa Cruz is provided as Figure 3 below.

<p>ADDITIONAL STOCK EXPECTED AFTER 1500</p> <p>ON: Author: Title: Course #: Reason for Delay:</p>
--

Figure 3. Sample Problem Notification Tag.

I. RETURNS TO VENDORS

Publishers and Wholesalers set time limits for when they will accept textbook returns. The time frames can be as short as 90 days from the date of purchase. After the return deadline passes, the Publishers and Wholesalers will no longer accept returns. The Bookstores are stuck with any remaining textbooks left in inventory. It is therefore imperative that Bookstore personnel be vigilant in watching return deadlines in order to avoid being left with unwanted and usually unsalable textbooks.

PC Text will provide a computer generated listing of "all textbooks due back in the next 90 days". The Text Buyer at the Cabrillo College Bookstore uses this listing to track all returns and ensure no return deadlines are missed. [Ref. 2]

The Naval Postgraduate School Bookstore does not actively use this listing as a tool for tracking returns. Returns are processed when the Text Buyer has spare time during a quarter as opposed to proactively using the return listing as a guide. According to the Text Buyer, in the past this method of processing returns as time permits has resulted in the lapse

of the textbook return deadline. As a result, the NPS Bookstore has been left with unsalable textbooks in inventory. This dead stock is costly to either write off or carry in inventory. The Text Buyer cites continued staffing cutbacks as part of the reason this problem exists. Without an adequate staff to handle all of the tasks associated with ordering and selling textbooks, the return process suffers from a certain degree of inattention. [Ref. 1]

J. BUYBACKS

All of the bookstores visited handled buybacks in much the same manner as the NPS Bookstore as described in Section L of Chapter II. The bookstores offer buybacks during finals week and the first week of the quarter or semester through a combination of their own buybacks or through a Wholesaler.

Like the NPS Bookstore, the other bookstores pay students 50% of the retail price for textbooks that will be used in the upcoming quarter and sell them at 75% of the retail price. The student selling the textbook gets 50% of his cost back and the student buying the book gets a used book at 25% off the cost of a new textbook.

The only significant difference is the quantity of buybacks the bookstore will accept. As discussed in Chapter II, the NPS Bookstore does not set a limit on the number of textbooks it will buy back from the students. All of the other bookstores set a limit on the number of books they will purchase from students. For example, at the Cabrillo College Bookstore, the Text Buyer estimates the expected number of buybacks and limits his purchases to that amount [Ref. 2]. The primary reason for limiting buybacks is that accepting a larger number could result in an excess quantity of textbooks to be on hand. The resulting excess inventory is expensive to carry and/or return. In fact, if a bookstore is left with used textbooks that it did not purchase from a Wholesaler, it

cannot return them for credit.

The best customer service for the students is provided by the NPS Bookstore. Since the Bookstore will buy back all textbooks on the buyback list, students are not faced with the decision to sell a book before a final is complete. The NPS Bookstore has made a tradeoff between customer service and financial efficiency.

K. CUSTOM PUBLISHING

This Section introduces the idea of custom publishing and briefly explains the process. It is not intended to provide an in-depth analysis of custom publishing. It is included for informational purposes.

One of the fastest growing areas for bookstores is custom publishing. Custom publishing is a service provided by some bookstores which allows printing of items such as course readers, case studies and compilations of other copyrighted material. The Stanford and De Anza Bookstores are both involved in custom publishing. [Ref. 4]

In its simplest form, custom publishing is little more than a copying service. A Professor desiring copies of his instructor manual for class can have the Bookstore make copies and sell the material to the students. De Anza charges students five cents per printed side [Ref. 5].

Custom publishing becomes more complex when it involves copyrighted material. In this case, permission to copy the material must be obtained from the copyright holder either directly or through a third party such as the Copyright Clearance Center (CCC). The CCC will collect royalties from the Bookstore and send it to the copyright holder, usually a Publisher. The bookstore only pays royalties on the number actually sold, not the number of copies made. [Ref. 5]

Custom publishing is a benefit to the Professors because they can have course materials published at the Bookstore

rather than having to make copies themselves or have their departmental secretaries make copies. It is also a potential money maker for a bookstore. Stanford has annual sales in excess of \$1M in the custom publishing side of their Bookstore. [Ref. 4]

Custom publishing has the potential to be financially disadvantageous for the students, however. Course materials that used to be issued at no charge will now have to be purchased if custom publishing is used.

L. OUTSOURCING

Outsourcing is an alternate method of providing similar products and services and would be accomplished at NPS through the use of an outside vendor. Horngren, Foster and Datar define outsourcing as "the process of purchasing goods and services from outside vendors rather than producing the same goods or services within the firm" [Ref. 10]. The decision to outsource is often referred to as a make-or-buy decision.

The Navy Exchange currently runs the Naval Postgraduate School (NPS) Bookstore. The products and services could also be outsourced, or contracted out, to a private vendor. In this scenario, a company with expertise in running college bookstores would come in and take over the NPS Bookstore operation. Examples of such companies are Follett College Stores and Barnes and Noble.

There are numerous advantages to outsourcing. The vendor would provide the Naval Postgraduate School a guaranteed income. This income is usually around 5% of sales or a set flat amount, whichever is higher. The vendor would buy all existing textbook inventory, thereby ensuring the Navy Exchange would not suffer a large one-time loss on unsalable stock. The vendor would also refurbish the store and install its own computer system at no charge to NPS. Vendors usually offer to keep the old staff for an extended period of time,

thus avoiding layoffs. Finally, since most college bookstore vendors are affiliated with a Wholesaler, they have strong used textbook programs. [Ref. 4]

Outsourcing also has several disadvantages. The primary disadvantage is loss of control over the textbook sales and service function. Once the bookstore is leased out, NPS would lose control of pricing and stocking decisions. The private vendor is profit-oriented and must be profitable to survive. The vendor is able to charge almost any price and provide any level of service it desires. This could result in higher prices or reduced service to the students.

With the current system, the Superintendent of the Naval Postgraduate School has a great deal of influence over pricing and service decisions. The Navy Exchange Officer-In-Charge reports directly to the Superintendent, a two-star Admiral. [Ref. 7] Outsourcing would negate most of that influence.

Another disadvantage of outsourcing is that the individual status of the bookstore may be lost. This can happen because the store is at the mercy of corporate decision making. Leased bookstores with central buying policies may be inflexible or unable to respond to the local needs. [Ref. 4]

Outsourcing the NPS Bookstore to a private vendor has numerous advantages and disadvantages. The concept would require and is worthy of further study.

M. SUMMARY

This Chapter provided an analysis of procedures used at the Stanford, UCSC, Cabrillo and De Anza Bookstores. Where applicable, a comparison was made to the procedures used at the Naval Postgraduate School Bookstore. Conclusions and recommendations based on this analysis will be provided in Chapter V.

The next Chapter specifically analyzes the retail prices of textbooks through a direct comparison with other college and university bookstores. It determines whether or not the NPS student is paying a reasonable price for textbooks.

IV. ANALYSIS OF RETAIL TEXTBOOK PRICES

A. INTRODUCTION

Chapter IV presents a direct comparison between the retail price of textbooks at the Naval Postgraduate School Bookstore and the retail price of textbooks at the Stanford University, Cabrillo College and the University of California, Santa Cruz (UCSC) bookstores. An analysis of textbook pricing policies is also provided and is intended to illustrate the similarity of those policies among the bookstores researched.

B. NPS STUDENT OPINION SURVEY

In 1994, a survey of NPS students was conducted by the Academic Quality Management Board (QMB). The Academic QMB investigated issues of importance to students [Ref. 17].

The Academic Quality Management Board is a total quality leadership team formed by the Executive Steering Committee of NPS to look at improvements to the Academic processes of the Naval Postgraduate School [Ref. 17].

Students were asked to assess various Educational Products and Services at NPS. Students were specifically asked to rate the "Cost of textbooks at the NPS Bookstore", based on two questions. The questions were "How important do you feel the product is to your education?" and "How would you rate our performance in providing this product?" [Ref. 17]

1,026 students answered the above questions. In answering the first question, 852 of the respondents said that cost of textbooks was either "extremely important" or "important" to their education. Importance scored an average of 7.62 on a scale of 1 to 10, with 10 being "extremely important." [Ref. 17]

In answering the second question, 727 of the respondents said that bookstore performance in providing the product "met

minimum requirements" or were "dissatisfied." Performance scored an average of -2.96 on a scale of -10 to +10, with -10 being "dissatisfied." [Ref. 17]

This survey indicates that students consider the cost of textbooks to be very important and that they are generally not satisfied with the performance of the Bookstore in providing a reasonably priced textbook. Of all the Educational Products and Services rated by the survey, the student interest in the cost of textbooks was at least as important as any other single area considered. [Ref. 17]

The remainder of this chapter provides an analysis of how the NPS Bookstore compares to other college and university bookstores in terms of price to the student. It attempts to determine if the students are getting a reasonable price when compared to prices students pay at similar institutions.

C. TEXTBOOK PRICING

NPS Bookstore pricing policies and procedures were discussed at length in Section J of Chapter II. The reader is reminded that the NPS Bookstore adds 6.5% to the cost of a textbook every time a freight charge is included on the vendor's invoice for that textbook. The Bookstore then uses a 20% retail mark up method to determine the final selling price to the student. Not all textbooks incur a freight charge, however. For textbooks received without a freight charge, the NPS Bookstore uses a 20% retail mark up on the invoiced cost. [Ref. 1]

Stanford, Cabrillo and UCSC all use a 25% retail mark up method to arrive at the retail or selling price charged to students. Freight charges are not added separately, rather freight is included in the 25% retail mark up. These bookstores apply the 25% retail mark up to the invoiced cost of the textbook. [Refs. 2, 3, 4]

One important distinction must be made at this point. At

the NPS Bookstore, the selling price marked on the textbook is the price the student actually pays at the cash register. No sales tax is added to the retail price. At Stanford, Cabrillo and UCSC, however, California state and local sales tax of 8.25% is added to the selling price at the cash register [Refs. 2, 3, 4]. Thus, a textbook marked for sale at \$50.00 in the NPS Bookstore would cost the student \$50.00. The same \$50.00 textbook at the other bookstores would cost the student \$54.13 after adding the 8.25% sales tax. For consistency in price comparison, however, the sales tax is not included as part of the data analysis.

D. DATA ANALYSIS

The data used for selling price comparison were obtained during a visit to each of the bookstores. The NPS price lists [Ref. 18] cover four consecutive quarters, from Spring 1994 to Winter 1995. The Stanford Bookstore price list [Ref. 19] covers the Winter 1995 quarter. The Bay Tree Bookstore of UCSC price list [Ref. 21] covers the Spring 1995 Quarter. The Cabrillo College Bookstore price list [Ref. 20] covers the Spring 1995 semester. De Anza College did not have a price list available and is not included in this analysis.

The researcher compared the NPS Bookstore price lists to the other bookstore price lists. When an apparent match of author and textbook title was identified, the edition number and International Standard Book Number (ISBN) was double checked to ensure the match was identical. The NPS price and the associated price from the other bookstore were then recorded in Tables 2, 3 and 4.

Table 2 is a comparison of prices for identical textbooks at the NPS and Stanford Bookstores. Table 3 is a comparison of prices for identical textbooks at the NPS and UCSC Bay Tree Bookstores. Table 4 is a comparison of prices for identical textbooks at the NPS and Cabrillo College Bookstores.

TABLE 2
TEXTBOOK PRICES
NPS AND STANFORD BOOKSTORES

Book	NPS Price (\$)	Stanford Price (\$)
1	56.40	56.50
2	70.90	71.00
3	8.45	10.95
4	68.25	69.50
5	13.85	13.00
6	14.90	14.00
7	73.25	73.50
8	66.60	66.95
9	50.00	50.50
10	71.90	72.00
11	8.45	10.95
12	61.75	61.95
13	65.25	65.50
14	63.85	59.95
15	63.90	64.00
16	75.90	76.00
17	59.00	59.00
18	26.65	25.00
19	7.70	10.00
20	28.70	28.95
21	65.25	60.00
22	45.30	42.50
23	71.30	71.50
24	8.75	10.95
25	75.90	80.00
26	74.90	75.00

27	63.90	64.00
28	15.95	14.95
29	75.90	76.00
30	73.90	78.00
31	77.25	79.50
32	69.25	71.00
33	6.35	8.95
34	7.85	9.95
35	17.75	16.50
36	68.20	69.50
37	58.75	65.50
38	30.65	29.95
Average	49.02	49.55

Source: Naval Postgraduate School Bookstore and Stanford Bookstore Price Lists.

TABLE 3
TEXTBOOK PRICES
NPS AND UCSC BOOKSTORES

Book	NPS Price (\$)	UCSC Price (\$)
1	60.90	60.00
2	67.95	69.00
3	63.90	64.00
4	38.30	38.35
5	49.30	50.10
6	69.25	69.35
7	15.70	14.95
8	59.90	64.00
9	17.50	22.95
10	67.90	63.35
11	74.50	77.95
12	22.90	21.50
Average	50.67	51.29

Source: Naval Postgraduate School Bookstore and The Bay Tree Bookstore at University of California, Santa Cruz Price Lists.

TABLE 4
TEXTBOOK PRICES
NPS AND CABRILLO BOOKSTORES

Book	NPS Price (\$)	Cabrillo Price (\$)
1	19.95	24.95
2	66.90	67.00
3	20.65	20.75
4	23.40	21.50
Average	32.73	33.55

Source: Naval Postgraduate School Bookstore and Cabrillo College Bookstore Price Lists.

The NPS Bookstore price lists contained a total of 1,597 textbooks [Ref. 18]. The Stanford Bookstore price list contained 2,409 textbooks [Ref. 19]. Cabrillo [Ref. 20] and UCSC [Ref. 21] price lists contained 1,870 and 917 textbooks, respectively.

A total of fifty-four textbooks were matched between the NPS Bookstore and the other bookstores, thirty-eight at Stanford, twelve at UCSC and four at Cabrillo. The NPS Bookstore average price was lower than the average price of all of the other bookstores. Table 2 shows that the NPS Bookstore had a lower price than The Stanford Bookstore on twenty-eight of thirty-eight textbooks. One textbook was marked the same price. On average, the NPS Bookstore's prices were lower than Stanford's prices by fifty-three cents.

Table 3 shows that the NPS Bookstore had a lower price than the UCSC Bookstore on eight of twelve textbooks. On average, the NPS Bookstore's prices were lower than UCSC's prices by sixty-two cents.

Table 4 shows that the NPS Bookstore had a lower price than the Cabrillo College Bookstore on three of four textbooks. On average, the NPS Bookstore's prices were lower

than Cabrillo's prices by eighty-two cents.

Based on the data obtained, the researcher concludes that textbooks at NPS are slightly less expensive than at the other college and university bookstores examined. The data show that, on average, textbook prices at the NPS Bookstore are comparable to prices at other bookstores.

The Academic Quality Management Board (QMB) results indicate that students feel they are not getting the best possible price on their textbooks. Anecdotal evidence obtained from the NEX Officer-In-Charge supports the QMB findings. The NEX Officer regularly hears comments that the prices are too high or out of line with other bookstores. [Ref. 7]

The data indicate that this is not the case, however, as NPS Bookstore textbook prices are comparable to textbook prices at Stanford, UCSC and Cabrillo. With the sales tax factor included, NPS students are paying less than their counterparts in civilian colleges for textbooks. Many students appear to be under the misconception that the NPS Bookstore prices are higher than other places.

E. SUMMARY

The data show that textbook prices at the NPS Bookstore are, on average, slightly lower than textbook prices at the Stanford, UCSC and Cabrillo Bookstores. It answers the subsidiary thesis question, "Are textbooks at the NPS Bookstore more or less expensive than at other college and university bookstores?"

V. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

The following conclusions and recommendations are based on the data analyzed, observations made and knowledge gained by the researcher during the course of the study. Areas are discussed in the same order as in previous chapters.

B. CONCLUSIONS

1. Inefficiencies exist in the current Naval Postgraduate School (NPS) Bookstore operations. There are several areas where improvements should be made in the Bookstore operations. Specifically, nine recommendations for improving NPS Bookstore efficiency are provided in the next section of this chapter.

2. Late submission of requisitions is the primary reason why textbooks are not available at the beginning of a quarter. This is a problem common to all of the bookstores researched. With an on-time requisition submission rate of approximately 50% at NPS, the Text Buyer is always behind in the ordering and receiving process. Late requisition submissions also cause increased costs in the Bookstore because of the labor rework and higher freight costs.

3. The accounting system utilized by the Navy Exchange is inadequate to track direct and indirect costs. Thus, the determination as to whether or not the NPS Bookstore actually turned a profit or loss cannot be accurately determined with certainty. Freight charges cannot be traced back to the Bookstore Department. Indirect charges, such as central office expense, depreciation and utilities are allocated arbitrarily.

4. Textbooks at the Naval Postgraduate School Bookstore are priced slightly lower than at other college and university bookstores. When compared to the Stanford Bookstore, the Bay

Tree Bookstore at the University of California, Santa Cruz and the Cabrillo College Bookstore, the NPS Bookstore provides a lower priced textbook to the student. This comparison was made based on the price of the textbook prior to the addition of sales tax, where applicable.

C. RECOMMENDATIONS

1. The NPS Bookstore should adopt a three fold strategy in order to improve on-time submission of textbook requisitions. First, it should hold an Awareness and Appreciation Day for departmental secretaries similar to, but on a smaller scale than the Stanford Bookstore. This would give the bookstore an opportunity to show the secretaries how they can positively impact the textbook process. Second, the Bookstore should send Department Heads an interim list of requisitions not received, prior to the requisition deadline. This is a proactive measure that would encourage Department Head involvement in the process. Third, the Bookstore should bill all expedited freight charges for late textbook orders to the individual responsible departments. This would help to improve profitability and discourage late submission of requisitions.

2. The NPS Bookstore should be placed on-line with the Registrar's Office in order to have access to more current and accurate enrollment information. Accurate enrollment information is critical when placing textbook orders. Under the existing method, the NPS Bookstore uses the hard copy listing received from the Registrar, which is already outdated. By going on-line, the Bookstore would be able to more accurately determine order quantities, improving efficiency and profitability.

3. The NPS Bookstore should begin a subscription to the Master Text Listing (MTL). The MTL is inexpensive and provides access to a much larger inventory of textbooks. The

MTL would be especially useful for reordering out-of-stock textbooks. It would also provide a method for greatly reducing the delivery time of orders requiring prepayment.

4. The NPS Bookstore should begin using Easylink to order textbooks from Wholesalers. The existing Bookstore practice is to place all orders with Wholesalers by facsimile or telephone. Easylink is more efficient than facsimile and telephone and accessible through the PC Text computer system. The use of Easylink will increase the efficiency of the Bookstore staff and should be used to the maximum extent possible.

5. The NPS Bookstore should implement the use of Problem Notification Tags. The tags would increase efficiency by reducing the amount of time the Bookstore staff spends answering student questions. They also improve customer service by eliminating the need for the student to have to wait in line or seek the Text Buyer in order to ask a question that could easily be answered by reading a Problem Notification Tag. Chapter III, Section H, Figure 3 provides a sample Problem Notification Tag that could be used.

6. The NPS Bookstore should be more vigilant in returning textbooks. Although current staffing somewhat limits the ability of the Text Buyer to conduct returns in a timely manner, the process could be improved by utilizing the PC Text listing of returns due within 90 days. This provides the Text Buyer an easy way to monitor return deadlines and avoid the problem of unsalable or unreturnable inventory.

7. The NPS Navy Exchange should eliminate the requirement for memo chargebacks. PC Text requires the Text Buyer to prepare a chargeback for returned textbooks. Navy Exchange instructions requires preparation of a memo chargeback which contains the same information. This duplication of effort is not necessary and should be eliminated.

8. **The NPS Bookstore should consider limiting buybacks of used textbooks.** By not placing a limit on the number of buybacks, the Bookstore is often left with new textbooks that must be returned or used textbooks that are unsalable. This policy reduces profitability of the Bookstore. On the other hand, it is the most beneficial policy for the students. It remains a political issue that needs resolution.

9. **The Naval Postgraduate School should assume some of the risk of operating the NPS Bookstore by providing compensation to the Navy Exchange (NEX).** By running the NPS Bookstore, the Navy Exchange (NEX), a Non-Appropriated Fund (NAF) activity, provides direct support to the Naval Postgraduate School, an Appropriated fund activity. The Navy Exchange assumes 100% of the risk of running the Bookstore.

As an Appropriated fund activity, the Naval Postgraduate School should share some of this risk. Several options for risk sharing exist. The Naval Postgraduate School could provide two employees to perform the functions required to operate the Textbook portion of the Bookstore. NPS could also compensate the NEX for the salaries of the personnel that directly perform their functions in support of ordering and selling textbooks. The amount of the salaries saved would go straight to the bottom line and increase overall profitability of the Navy Exchange. Assuming the NEX was profitable, most of these savings would be transferred to the NPS Morale, Welfare and Recreation (MWR) Fund, improving Quality of Life for NPS personnel.

D. ANSWERS TO RESEARCH QUESTIONS

The following are a reiteration of the primary and subsidiary research questions. Their answers are based on the analysis and applications drawn from this thesis.

1. Primary Research Question

Are there inefficiencies in the current Naval

Postgraduate School Bookstore ordering and selling practices and, if so, what steps can be taken to remove or reduce these inefficiencies?

The researcher identified several inefficiencies in the existing Naval Postgraduate School Bookstore operations and practices and provided recommendations for improvement. In the researcher's analysis, implementation of these recommendations would increase efficiency and profitability of the NPS Bookstore.

2. Subsidiary Research Questions

Are textbooks at the Naval Postgraduate School (NPS) Bookstore more or less expensive than at other college and university bookstores?

Textbooks at the Naval Postgraduate School Bookstore are priced slightly lower than at other college and university bookstores. Students are paying a reasonable price for textbooks which is comparable to the other college and university bookstores researched.

Should the NPS Bookstore continue to be run by the Navy Exchange or should the Exchange consider outsourcing the Bookstore's products and services to an outside vendor?

Outsourcing the Naval Postgraduate School Bookstore operations to a private vendor provides several advantages and disadvantages. The fact that outsourcing provides a guaranteed income to the Naval Postgraduate School provides an incentive to further investigate outsourcing. As suggested in the Section E of this chapter, outsourcing should be further studied.

Is there an optimal number of textbooks to order? While there is an optimal number of textbooks to order, a formulaic approach to determining that number in advance would not be realistic. Too many uncontrollable variables exist in the process that preclude such an approach from being effective. Examples of uncontrollable variables include the uncertainty

of actual class enrollment, the number of buybacks and student purchasing behavior. General rules of thumb could be established, but each individual textbook order must be interpreted by the Text Buyer.

Are the current buyback policies efficient and beneficial for the students when compared to other college and university bookstores? The Naval Postgraduate School Bookstore buyback policies and procedures are nearly identical to the other bookstores researched in terms of both price and service. The exception is that the other bookstores limit the number of buybacks, while the NPS Bookstore does not. This policy is not economically efficient for the NPS Bookstore, but it does provide the students with the best possible customer service.

E. AREAS FOR FURTHER RESEARCH

The researcher believes the current Navy Exchange (NEX) accounting system fails to provide adequate cost visibility in several areas. A study could be conducted in an attempt to determine if the Exchanges would benefit from a different accounting method, such as Activity Based Costing (ABC). The study would need to include a cost/benefit analysis to determine if the increased visibility of cost data is worth the cost of implementation and tracking under a different system.

Custom publishing is a rapidly growing field and has the potential to be a very profitable area. The market for custom publishing at NPS is untested and untapped. Further research could be conducted to determine whether or not the NPS Bookstore should become involved in the custom publishing business. The Stanford Bookstore has a very large custom publishing operation and would provide a starting point for such research.

As discussed in Chapter III, Section L, outsourcing the Naval Postgraduate School Bookstore operations to a private

vendor provides several attractive advantages including a guaranteed income, purchase of existing inventory and refurbishment of the sales areas. Outsourcing also has many disadvantages. A cost/benefit analysis could be conducted to see if outsourcing would be advantageous to the Naval Postgraduate School, the Navy Exchange, the students and the Professors. Issues regarding profitability and customer service would have to be resolved. The actual identification of a possible vendor or vendors could be accomplished.

LIST OF REFERENCES

1. Hall, La Shanda, Text Buyer, Navy Exchange Bookstore, Naval Postgraduate School, Monterey, CA, interviews with researcher, 31 January, 21 February, 3 March and 28 March 1995.
2. Derr, Michael, Text Buyer, Bookstore, Cabrillo College, Aptos, CA, interview with researcher, 28 February 1995.
3. Curry, Brooke, Coursebook Buyer, The Bay Tree Bookstore, University of California, Santa Cruz, Santa Cruz, CA, interview with researcher, 28 February 1995.
4. Sayegh, Hani, Course Materials Manager, Stanford Bookstore, Stanford University, Stanford, CA, interview with researcher, 16 March 1995.
5. Behrens, Herb, Courseware Supervisor, Bookstore, De Anza College, Cupertino, CA, interview with researcher, 16 March 1995.
6. Naval Postgraduate School Instruction 4066.1F, "Navy Exchange Bookstore Operations," Monterey, CA, 28 December 1992.
7. Adams, Mike, LCDR, SC, USN, Navy Exchange Officer-In-Charge, Naval Postgraduate School, Monterey, CA, interviews with researcher, 1 March, 3 April, 25 April and 9 May 1995.
8. Superintendent, Naval Postgraduate School, Monterey, CA letter NC4(418)/kh, 5216.1 (4066), 19 March 1973.
9. U. S. Department of the Navy, Navy Supply Systems Command, Navy Exchange Manual.
10. Horngren, Charles T., George Foster and Srikant M. Datar, Cost Accounting, 8th ed., Englewood Cliffs, New Jersey, Prentice Hall, 1994.
11. Grisso, Russ, Accounts Payable Manager, Navy Exchange Bookstore, Naval Postgraduate School, Monterey, CA, interview with researcher, 31 January 1995.
12. MacDonald, Scott, Receiver, Navy Exchange Bookstore, Naval Postgraduate School, Monterey, CA,

interview with researcher, 31 January 1995.

13. Groscop, Carol, Bookstore Manager, Navy Exchange Bookstore, Naval Postgraduate School, Monterey, CA, interview with researcher, 11 April 1995.
14. Naval Postgraduate School, Monterey, CA, Practical Comptrollership Manual, September 1994.
15. Geldermann, Daniel F., A Financial Review and Cost-Benefit Analysis of Fuel Storage Tank Upgrades at the Navy Exchange Gas Station, Naval Postgraduate School, Monterey, California, Master's Thesis, Naval Postgraduate School, Monterey, CA, June 1993.
16. Pindyk, Robert S. and Daniel L. Rubinfeld, Microeconomics, 2nd ed., New York, Macmillan Publishing Company, 1992.
17. Bailey, Mike, NPS Student Opinion Survey, Academic Quality Management Board, Naval Postgraduate School, Monterey, CA, 1994.
18. Navy Exchange Naval Postgraduate School Bookstore Price Lists, Winter, Spring and Summer Quarters, 1994, and Fall Quarter 1995, Naval Postgraduate School, Monterey, CA.
19. Stanford Bookstore Price List, Winter Quarter 1995, Stanford University, Stanford, CA.
20. Cabrillo College Bookstore Price List, Spring Semester 1995, Cabrillo College, Aptos, CA.
21. The Bay Tree Bookstore Price List, Spring Quarter 1995, University of California, Santa Cruz, Santa Cruz, CA.

APPENDIX.

NAVAL POSTGRADUATE SCHOOL INSTRUCTION 4066.1F

"NAVY EXCHANGE BOOKSTORE OPERATIONS"

28 DECEMBER 1992



DEPARTMENT OF THE NAVY

NAVAL POSTGRADUATE SCHOOL
MONTEREY, CA 93943-5100

IN MEMO REFER TO
NAVPGSCOLINST 4066.1F
NPS (48)
28 December 1992

NAVPGSCOL INSTRUCTION 4066.1F

From: Superintendent

Subj: NAVY EXCHANGE BOOK STORE OPERATIONS

Ref: (a) Armed Services Exchange Regulations (ASER) DOD
Directive 1330.9
(b) NAVPGSCOLINST 1522.1

Encl: (1) Textbook Requisition
(2) Optional Text Order Form

1. Purpose. To establish guidelines for the operation of the Navy Exchange (NEX) Book Store and procedures for ordering textbooks.

2. Cancellation. NAVPGSCOLINST 4066.1E

3. Information. Full Book Store privileges are extended to all authorized Navy Exchange patrons. The Secretary of the Navy has also authorized the purchase of textbooks and other course related items for civilian members of the faculty and civilian students enrolled in Naval Postgraduate School (NPS) curricula. Limited privileges for international and civilian students on official orders from the U.S. Government may be granted by the Superintendent per reference (a).

4. Action

a. Book Store Merchandise. The NEX Book Store will stock textbooks, supplemental and reference books, and course or school related materials such as paper, pens, pencils, typewriters, computers, hand-held calculators, and other materials that may be required by students.

b. Textbook Ordering Procedures. Each academic department shall submit textbook requirements directly to the Book Store (Code 48 BKST) by the end of the fifth week of the current quarter. The Textbook Requisition (Enclosure (1)) will be used to submit all requirements. The requisition form must be completed in its entirety and must correctly state author, title, edition, International Standard Book Number, estimated price, and publisher, so the Book Store will have adequate information to order the required books and develop historical information for future use. All requirements shall be submitted, including those for refresher courses. If supplemental volumes such as programmed texts, workbooks, or study guides are necessary for a class, instructors should list these as a required text with the

suggested number of copies. Department chairpersons will approve all textbook orders prior to submission to the Book Store. Once submitted, changes in textbook requirements, either in title or edition, will be submitted to the Book Store Manager by the department chairperson, not individual instructors. Quantities of textbooks desired will be provided by the Registrar and will be entered on the purchase order at the time it is forwarded to the publisher (distributor). Changes received after the sixth week of the current quarter may result in requested textbooks not being available at the beginning of the academic quarter. Late submission of textbook requests will be referred to the appropriate department chairperson when corrective action is required.

c. Optional Textbooks. If optional textbooks are required during the quarter, they may be ordered during the first week of class. This order shall be submitted in writing using enclosure (2).

d. Cost Guidance. The cost of textbooks for an individual course should not exceed \$90.00 per quarter unless warranted by special circumstances. During the third week of the new quarter, the bookstore will print a price list and inventory, by course, for distribution to the Dean of Instruction, Dean of Students, and Academic Chairpersons. This listing will provide the current pricing and inventory on hand, and is to be used for cost guidance in developing future textbook requirements. A listing of those courses with textbook costs exceeding \$90.00 per quarter will be forwarded to the Dean of Instruction via the Director of Military Operations. When possible, the Book Store will purchase lower priced, used textbooks to help reduce costs to students.

e. Return of Books. During the sixth week of each quarter, the Book Store Manager shall inventory all textbooks in stock. Those textbooks not required for subsequent quarters will be returned to the publisher, sold to a used book dealer, or when possible, offered to students at a discount.

f. Hours of Operation. The Book Store shall operate during the following hours:

Monday through Saturday	1000 - 1700
Sundays and Holidays	CLOSED

g. Textbook Buy Backs. The Book Store (or a used book dealer) shall conduct four buy backs each quarter; two during the first week of classes and two during finals week. The location for all textbook buy backs will be the Book Store. Dates and times will be posted throughout the school and also on the Book Store bulletin board. The Book Store will buy back all books in

good condition that are to be used the following quarter. The used book dealer will buy back the most current textbook edition.

h. Refunds. Refunds shall be granted in full only when all of the following conditions are met:

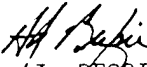
(1) A cash register receipt is presented.

(2) Textbooks purchased as new books are returned in new condition. Refunds for books purchased new, but containing markings or names, are not authorized; such books may be sold back at regular buy back times, as used textbooks.

(3) New textbooks must be returned within 14 days of purchase or by the tenth day of the new quarter, whichever is later. Exceptional circumstances, such as class cancellations, will be handled on an individual basis.

i. International Student Charge Sales. Per reference (b) international students shall be permitted to charge sales for required textbooks and other authorized texts using the Educational Material Charge Slip (NPS Form 1500-1).

j. Special Orders. Textbooks may be special ordered per Navy Exchange System special order procedures. Pre-payment of the full list price of the text will be required at the time of the order. Postage fees will be paid upon customer's receipt.


A. J. BEEBIE
By direction

Distribution:

- NAVPGSCOLINST 5605.2P
AD-1, AD-2, B-1, B-2, B-5, B-6, B-8, B-15,
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TEXTBOOK REQUISITION NAVY EXCHANGE 110-380-M54

FOR TERM: _____

DEPT: _____

COURSE: _____

INSTRUCTOR'S NAME: _____ PHONE EXT: _____

SECTION NUMBER(S): _____

THIS TERM'S ANTICIPATED ENROLLMENT: _____

Enter new adoptions below:

AUTHOR	TITLE	B	ISBN	ED/YR	PUBL	Est Price	REQ #

SPECIAL NOTES:

INSTRUCTOR'S SIGNATURE

DATE

DEPARTMENT CHAIR'S SIGNATURE

DATE

Encl (1)

To: Code 48, Bookstore
Via: Academic Chairperson

Subj: OPTIONAL TEXT ORDER FORM

1. The following optional text(s) are required for course_____

Title: _____

ISBN #: _____

Total #: _____ Due Date: _____

Student Name

SMC #

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Title: _____

ISBN #: _____

Total #: _____ Due Date: _____

Student Name

SMC #

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

DEPARTMENT CHAIR'S SIGNATURE/DATE

Encl (2)

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